"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

L 17425-63 EWP(q)/EWT(m)/BDS AFFTC/ESD-3 RM/JD/JG

ACCESSION NR: AP3004347 S/0078/63/008/008/1900/1905

AUTHOR: Kostromina, N. A.

TITLE: Stability constants of cation complexes of rare earth elements with gluconic acid

SOURCE: Zhurnal neorganicheskoy khimii, v. 8, no. 8, 1963, 1900-1905

TOPIC TAGS: rare earth element, gluconic acid, potentiometric titration, La, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Yb, Lu, Y

ABSTRACT: Author showed in a previous work that rare earth elements form complex cations at a pH of about 2 to 3 which contain one and two singly-charged gluconic acid radicals for each metal ion. The stability constants of the complexes MA^{2+} and MA_2^+ were studied in present work for La, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Yb, Lu, and Y. Constants were determined by potentiometric titration on a base of rare earth chloride-gluconic acid mixtures with temperature of 25C and ion strength of 0.2. Rare earth element chloride concentration was 5×10^{-3} and 2×10^{-2} mole/liter with MCl_3 to Ha ratio of 1 : 1 and 1 : 5. Measurement of pH on a pH meter was with accuracy of + or - 0.02 pH. The stability constants of

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L 17425-63

ACCESSION NR: AP3004347

the equimolar composition of the above complexes were calculated at the concentrations and conditions stated above. In cases where both MA^{2+} and MA_2^{+} complexes are formed, the calculation of the stability complex is done graphically. Orig. art. has: 3 tables, 3 graphs and 15 equations.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii Akademii nauk UkrSSR (Institute of general and inorganic chemistry, Academy of sciences, UkrSSR)

SUBMITTED: 190ct62 DATE ACQ: 21Aug63 ENCL: 00

SUB CODE: PH, CH NO REF SOV: 004 OTHER: 006

Card 2/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMINA, N.A.

Stability constants of the cation complexes of the rare earth elements with gluconic acid. Zhur. neorg. khim. 8 no.8:1900-1905 Ag '63. (MIRA 16:8)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
(Rare earth compounds) (Gluconic acid)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMINA, N.A.

Complex compounds of rare earth elements with gluconic acid. Rab. po khim. rastv. i kompl. soed. no.3:118-135 '62.

Separation of rare earth elements by ion exchange chromatography. Ibid.:136-147 (MIRA 16:8)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

YATSIMIRSKIY, K. B.; DAVIDENKO, N. K.; KOSTROMINA, N. A.; TERNOVAYA, T. V.

"Chemical structure determination of lantanides' coordination compounds on the basis of their absorption spectra."

report presented at the 8th Intl Conf on Coordination Chemistry, Vienna, 7-11 Sep 64.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

L 15797-65 EWT(m)/EWP(j)/EWP(t)/EWP(b) IJP(c)/ESD(gs)/ESD/APWL/ASD(a)-5/AS(mp)-2/
ACCESSION NR: AP4043570 APGC(b) JD/ S/0078/64/009/008/0793/1802
JG/RM

AUTHORS: Yatsimirskiy, K.B.; Kostromina, N.A.

B

TITLE: The influence of ligand fields on the properties of complexes of the rare earth elements 27

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 8, 1964, 1793-1802

TOPIC TAGS: rare earth element complex, ligand field, absorption spectrum, f orbital transition, d orbital transition, absorption spectrum splitting, octahedral symmetry group, tetrahedral symmetry group, cubic symmetry group, energy of stabilization, cerium subgroup, yttrium subgroup, ligand field strength

ABSTRACT: The splitting in the absorption spectra of the energy levels of the 4f electrons of rare earth complexes having ligands of different symmetry was investigated. This splitting was noted to have a magnitude of the order of several hundrel cm^{-1} as compared with the 10,000-20,000 cm^{-1} found for d-orbital transitions. The f-orbital transitions were postulated as due to transitions to orbitals forming octahedral, tetrahedral, and cubic symmetry groups. The energy of stabilization for these structures can be calculated:

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for octahedral complexes, from the formula

$$\Delta E = (^6/_{15}n_1 + {}^1/_{15}n_2 + {}^3/_{15}n_3)\,14Dq0_h \qquad (2)$$

where n_1, n_2, n_3 represent the number of electrons in the a_{2u}, t_{2u}, t_{1u} states, respectively, and Dq is the ligand field strength; and for tetrahedral and cubic complexes:

$$\Delta E = (^3/_{15}n_1 - {}^1/_{15}n_2 - {}^6/_{15}n_3)\,14Dq^* \ (T_d \text{ or } 0_h) \qquad (3)$$

DqT_d is for the tetrahedral complex. The $Dq0_h$ for the cubic differs from $Dq0_h$ for the octahedral complexes. Designating the quantities in parentheses by ρ, then in aqueous solution

$$\Delta E' = \rho_A\,14Dq_A - \rho_{H_2O}\,14Dq_{H_2O} \qquad (7)$$

where ρ is determined from the geometric configuration of the complex and the electron structure of the central ion and Dq_A and Dq_{H_2O} is the field strength for the ligand and for water. $\Delta E'$ can also be represented by

$$\Delta E' = 2{,}3RT\,(\lg K_{\text{ycr}} - \lg K'_{\text{ycr}}) \qquad (10)$$

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where K_{equil} is the experimentally determined equilibrium constant and K'_{equil} is a value graphically obtained by interpolation of a straight line connecting the values for La, Gd, and Lu. Thus ΔDq can be calculated from

$$\Delta E' = \rho 14 \Delta Dq \qquad (11)$$

provided ρ does not change. Values obtained for Δ Dq (energy changes) agree well with spectroscopic values for the cerium group. A series of ligands was arranged according to increasing field strength for elements of the cerium group. This series differed for ligands of the yttrium group elements where the Dq values were less than for the cerium groups. Orig. art. has: 11 equations, 6 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 30Jan63 ENCL: 00

SUB CODE: IC, GP NR REF SOV: 031 OTHER: 008

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMINA, N.A.; ROMANENKO, E.D.

Gluconate complexes of scandium. Ukr. khim. zhur. 31 no.4: 332-338 '65. (MIRA 18:5)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMINA, N.A.

Constants of acidic dissociation of rare-earth gluconates. Zhur. neorg. khim. 10 no.6:1369-1373 Je '65. (MIRA 18:6)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

YATSIMIRSKIY, K.B.; DAVIDENKO, N.K.; KOSTROMINA, N.A.; TERNOVAYA, T.V.

Determination of the chemical structure of lanthanide coordination compounds based on their absorption spectra. Teoret. i eksper. khim. 1 no.1:100-105 Ja-F '65. (MIRA 18:7)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR, Kiyev.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

TERNOVAYA, T.V.; KOSTROMINA, N.A.

Splitting of bands in the absorption spectra of neodymium and europium in the ligand field during complex formation. Zhur. neorg. khim. 10 no.9:2023-2029 S '65. (MIRA 18:10)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

L 10458-66 EWT(m)/EWP(1)/T/EWP(t)/EWP(b) IJP(c) JD/JG/RM

ACC NR: AP6000284 SOURCE CODE: UR/0078/65/010/009/2023/2029

AUTHOR: Ternovaya, T.V.; Kostromina, N.A. 44,55

ORG: none 53

TITLE: Band splitting in absorption spectra of neodymium and europium in the field of ligands during complex formation

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 9, 1965, 2023-2029

TOPIC TAGS: neodymium, europium, band spectrum, absorption spectrum, complex molecule, line splitting, RARE EARTH METAL

ABSTRACT: The splitting of the ground level of neodymium $^4I_{9/2}$ and of the excited level of europium $^5D_2$ was studied in chlorides and in solutions of nitrilotriacetate (NTA), ethylenediaminetetraacetate (EDTA), and diethylenetriaminepentaacetate (DTPA) complexes. A KSA-1 spectrograph with glass optics was used. Identification of the splitting pattern of the ground level of Nd^{3+} (obtained at 430 nm), analysis of the spectrum, and consideration of the intensities of the components of the splitting made it possible to determine the absorption spectra of neodymium for all the complexes studied. From the number of splitting sublevels it was found that aquo ions and complexes with EDTA have a tetragonal symmetry, and complexes with NTA and DTPA have a trigonal symmetry. Probable structural formulas of the complexes are proposed. Orig. art. has: 9 figures and 3 tables.

SUB CODE: 07,20/ SUBM DATE: 13Apr64 / ORIG REF: 003 / OTH REF: 011

Card 1/1 pw UDC: 546.657.3:535.343+546.661.3:535.343

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

SHKOLYAR, L.F.; MAMONTOV, N.V.; GOL'DEVICH, A.A.; MAYOROVA, Z.V.; KOSTROMINA, N.V.; KUTYAVINA, V.M.; ROMALIS, F.I.; KAPLINSKAYA, L.G., red.; DROZHZHINA, L.P., tekhn. red.

[Transactions of the Soviet Antarctic Expedition] Trudy Sovetskoi antarkticheskoi ekspeditsii, 1955. Leningrad, Izd-vo "Morskoi transport." Vol.23. [Second Continental Expedition, 1956-1958; observational data] Vtoraia kontinental'naia ekspeditsiia, 1956-1958 gg.; materialy nabliudenii. Pod red. L.V.Dolganova. 1961. 277 p. (MIRA 14:11)

1. Sovetskaya antarkticheskaya ekspeditsiya, 1955. 2. Glavnaya geofizicheskaya observatoriya im. A.I.Voyeykova (for all except Kaplinskaya, Drozhzhina).

(Antarctic regions—Solar radiation)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMINA, O. Ye and Kozlov, N.

Catalytic Condensation of Acetylene with Aromatic Amines. XXII. Catalytic Synthesis of 2- (p-Methoxphenyl) -Quinoline and its Derivatives, page 934. Sbornik statey po obshchey khimii (Collection of Papers on General Chemistry), Vol II, Moscow-Leningrad, 1953, pages 1680-1686.

Molotov State Pedagogical Inst.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMINA, O.E.

CZECH

Catalytic condensation of acetylene with aromatic amines. XX. Catalytic synthesis of halogen and sulfanilamido derivatives of quinaldine. N. S. Kozlov and O. E. Kostromina (State Pedagog. Inst., Molotov). *Zhur. Obshchei Khim.* 2, 920–30(1953); cf. *C.A.* 32, 7916[4].—Dry C_2H_2 was passed 20 hrs. into 40 g. *p*-$ClC_6H_4NH_2$, 65 ml. EtOH, and 5 g. $HgCl_2$, 2 g. $HgCl_2$ then added, and the gas stream continued 12 hrs. longer; addn. of NaOH and steam distn. yielded 30.5% *6-chloroquinaldine*, m. 91°; *picrate*, decomp. 208°. Similarly was obtained 21.1% *6-bromoquinaldine*, m. 97°. Passage of C_2H_2 100 hrs. into 100 g. *p*-$H_2NC_6H_4SO_2NH_2$, 200 ml. EtOH, and 8 g. $HgCl_2$ gave a red tar with some Hg; the product was sepd., taken up in HCl, filtered, and neutralized with Na_2CO_3 yielding *6-sulfanilamidoquinaldine*, m. 212–13° (40.3%). Cf. Chelintsev and Zakotin, *C.A.* 36, 477[7]. XXI. Catalytic synthesis of 2-phenyl derivatives of quinoline. *Ibid.* 931–3.—Passage of C_2H_2 20 hrs. into 40.2 g. *o*-$MeC_6H_4NH_2$, 50 ml. EtOH, 26.5 g. BzH, and 5 g. $HgCl_2$, addn. of 5 g. $HgCl_2$, continuation of the gas stream 13 hrs., addn. of NaOH and steam distn. gave a residue of 68 g. crude product which on distn. yielded 14.6% *8-methyl-2-phenylquinoline*, m. 55°, isolated by distn., b_3 160–73°; after treatment with $K_3Fe(CN)_6$, then with KOH, and redistn., it b_3 165–70°; analyzed as the *chloroplatinate*. The following *substituted 2-phenylquinolines* were similarly prepd.: *7-Me* (35.4% from *m*-$MeC_6H_4NH_2$), m. 100° (from EtOH) (*picrate*, m. 192°; *chloroplatinate*); *6-MeO* (30.1% from *p*-$MeOC_6H_4NH_2$), m. 133° (*picrate*, decomp. 215°; *chloroplatinate*); *8-EtO* (18% from *o*-$EtOC_6H_4NH_2$), m. 70° (*picrate*, m. 164°; *chloroplatinate*; the crude base, b_3 160–200°); *6-Et* (18% from *p*-$EtOC_6H_4NH_2$) m. 136–7° (*picrate*, decomp. 227°; *chloroplatinate*). XXII.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

Catalytic synthesis of 2-*p*-methoxyphenylquinoline and its derivatives. *Ibid.* 66 1-2.—Passage of C_2H_2 into 20.5 g. $PhNH_2$, 100 ml. EtOH, 19.5 g. *p*-$MeOC_6H_4CHO$ and 5 g. $HgCl_2$ 10 hrs., addn. of 2 g. $HgCl_2$, and further gas passage 20 hrs. gave 46 g. tarry product which was taken up in 1:3 HCl, filtered, treated with $K_4Fe(CN)_6$ soln., and the ppted. complex treated with Na_2CO_3, yielding 21% 2-(*p*-*methoxyphenyl*)*quinoline*, m. 111–12° (from C_6H_6); *picrate*, d.-comp. 201–2°; *chloroplatinate*, bright yellow. The same reaction with *p*-$MeC_6H_4NH_2$ gave 20% *6-methyl-2-p-methoxyphenylquinoline*, m. 151° (from C_6H_6); *picrate*, decomp. 215°; *chloroplatinate*, orange. Similarly were prepd. the following *substituted 2-p-methoxyphenylquinolines*: *7-Me* (21.1% from *m*-$MeC_6H_4NH_2$), m. 141° (*picrate*, decomp. 209°; *chloroplatinate*, yellow); *8-Me* (33.7% from *o*-$MeOC_6H_4NH_2$), b$_3$ 160–200° (crude), m. 83–4° (from EtOH) (*picrate*, decomp. 187°; *chloroplatinate*, bright yellow); *8-EtO* (15% from *o*-$EtOC_6H_4NH_2$), b. 210–13°, m. 98° (from C_6H_6) (*picrate*, decomp. 197°; *chloroplatinate*, yellow). XXIII. **Catalytic synthesis of 2-(3,4-methylenedioxyphenyl)quinoline compounds.** *Ibid.* 937–8.—Passage of C_2H_2 into 30 g. piperonal, $PhNH_2$, 75 ml. EtOH, and 5 g. $HgCl_2$ 20 hrs., addn. of 3 g. $HgCl_2$ and continuation of the C_2H_2 treatment 30 hrs. gave after the treatment described above (preceding abstr.) 20.1% *2-(3,4-methylenedioxyphenyl)quinoline*, $C_{16}H_{11}O_2N$, m. 91°; *picrate*, decomp. 216° (from EtOH); yellow *chloroplatinate*. Same reaction with *m*-$MeC_6H_4NH_2$ gave 20% *7-Me deriv.*, b. 138°; *picrate*, decomp. 221–2°; yellow *chloroplatinate*. The following *Schiff bases* were prepd. from *piperonal* and aromatic amines (amine component shown): *PhNH$_2$*, m. 87°; *o-MeC$_6$H$_4$NH$_2$*, m. 105°; *m-analog*, m. 71°; *p-analog*, m. 101°; *p-ClC$_6$H$_4$NH$_2$*, m. 79°; *p-BrC$_6$H$_4$NH$_2$*, m. 108°; *p-MeOC$_6$H$_4$NH$_2$*, m. 108°; *o-EtOC$_6$H$_4$NH$_2$*, m. 79°; *p-analog*, m. 104°. G. M. Kosolapoff

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

5.3900,5.3600

78258
SOV/79-30-3-12/69

AUTHORS: Sheatakovskiy, M. F., Kostromina, O. Ye.

TITLE: Investigation in the Field of Precursors and Fragments of Antibiotics. III. Condensation of Trichlorobutadiene With Methyl α-Chloroacrylate

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 3, pp 781-784 (USSR)

ABSTRACT: Condensation of 1,2,3-trichlorobutadiene with methyl α-chloroacrylate in 6:1 molar ratio at 60° C, in the presence of hydroquinone, gave the new methyl ester of 1,3,4,5-tetrachloro- Δ^3-cyclohexenoic acid (I, yield 70.4% based on the acrylate). The adduct I was obtained in two stereoisomeric forms: the liquid form (bp 120° C at 5 mm), from which the crystalline form (mp 31.5° C) separated on standing. The presence of ester (II) was not detected.

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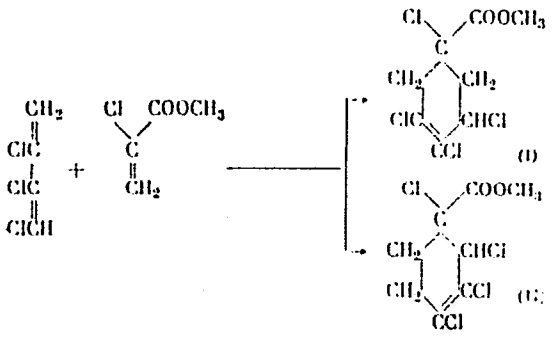
"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

Investigation in the Field of Precursors and Fragments of Antibiotics. III. Condensation of Trichlorobutadiene With Methyl α-Chloro-acrylate

78258
SOV/79-30-3-12/69



Card 2/3

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

Investigation in the Field of Precursors and Fragments of Antibiotics III. Condensation of Trichlorobutadiene With Methyl α-Chloroacrylate

78258
SOV/79-30-3-12/69

There are 6 references, 3 U.S., 1 German, 2 Soviet. The U.S. references are: U.S. Pat. 2712517 (1955); G. J. Berchet, W. C. Carothers, J. Am. Chem. Soc., 55, 2004 (1933); C. Marvel, ibid., 61,3156 (1939).

ASSOCIATION: All-Union Scientific Research Institute for Antibiotics (Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov)

SUBMITTED: June 23, 1959

Card 3/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMINA, O.Ye.; SHOSTAKOVSKIY, M.F.; VASIL'YEVA, N.Ye.

Synthesis of the precursors and fragments of antibiotics. Part 5: Synthesis of di- and trihaloderivatives of cyclohexenecarboxylic acid. Zhur.ob.khim. 31 no.5:1458-1462 My '61. (MIRA 14:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(Cyclohexenecarboxylic acid)
(Antibiotics)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMINA, O.Ye.; RABINOVICH, M.S.

Synthesis of procursors and fragments of antibiotics. Part 10: Synthesis of half-esters of α-phenoxyadipic and phenoxymalonic acids. Zhur. ob. khim. 33 no.5:1658-1660 My '63. (MIRA 16:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(Adipic acid) (Malonic acid)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

STRUKOV, I.T.; TEBYAKINA, A.Ye.; INOZEMTSEVA, I.I.; KOSTROMINA, O.Ye.; KAMOKINA, Z.F.; BUYANOVSKAYA, I.S.; SHNEYERSON, A.N.; CHAYKOVSKAYA, S.M.; DRUZHININA, Ye.N.

2,6-dimethoxyphenyl penicillin (methycillin) and its microbiological study. Antibiotiki 8 no.8:690-694 Ag '63. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

MEL'KANOVITSKIY, I.M.; KOSTROMINA, R.A.

Using geophysical data for mapping folds in the basement of the Tashkent trough. Uch.zap.SAIGIMS no.5:119-125 '61. (MIRA 15:11)
(Tashkent region--Folds (Geology)--Maps)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

L 33334-66 EWT(m)/EWP(j) RM

ACC NR: AP6021776 SOURCE CODE: UR/0413/66/000/012/0036/0036

INVENTOR: Kuznetsov, Ye. V.; Ignat'yeva, E. K.; Kostromina, S. Ya. 27 B

ORG: none

TITLE: Preparative method for nitrogen and phosphorus-containing organotitanium compounds. Class 12, No. 182722 [announced by Kazan Chemical Technology Institute im. S. M. Kirov (Kazanskiy khimiko-tekhnologicheskiy institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 36

TOPIC TAGS: organotitanium compcund, nitrogen containing organotitanium compound, phosphorus containing organotitanium compound, titanium compound

ABSTRACT: An Author Certificate has been issued for a preparative method for nitrogen and phosphorus-containing organotitanium compounds. Bis-(2-hydroxyethoxy)-bis-(aminoethyl)-titanium is reacted with derivatives of methylphosphonic acid substituted in methyl in a solvent. Hydroxymethylphosphonic acid is used as a derivative of the substituted methylphosphonic acid for preparing new compounds. [BN]

SUB CODE: 07/ SUBM DATE: 03May65/ ATD PRESS: 5126

Card 1/1 UCR UDC: 547.419.1'258.2.07

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

USSR/Medicine/Immunology FD-2953

Card 1/1 Pub. 17-17/23

Author : Kostromina, Ye. Ye.

Title : Effect of vagotomy on the formation of agglutinins during enteral vaccination

Periodical : Byul. eksp. biol. i med. 7, 60-62, July 1955

Abstract : Author experimented on rabbits to determine the effect of bilateral vagotomy below the diaphram on the formation of antibodies realizing at the same time, that vagotomy does not completely eliminate the innervation of the gastrointestinal tract by the parasympathetic system (fibers of the sacral region, posterior roots of the spinal chord etc.). 25 to 30 days after the operation the animals were given the vaccine per os. The blood was examined after various lengths of time following vaccination. No antibodies were found. There was no difference in the antibody formation of the control rabbits and those that had been operated on because, during the enteral immunization, a natural disturbance of the innervation existed at the locus of primary application of the antigen. No references. Graphs.

Institution : Experimental Laboratory, Molotov Scientific-Research Institute of Vaccines and Sera (Dir A. P. Kobyl'skiy; Scientific Leader Prof. G. V. Peshkovskiy.)

Submitted : 27 Dec 1954

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMINA, Ye.Ye.

Some data on the epidemiology of Q fever in the Western Urals. Zhur. mikrobiol. epid. i immun. 33 no.10:140-141 O'62 (MIRA 17:4)

1. Iz Permskogo instituta vaktsin i syvorotok.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMINA, Ye.Ye.

Use of a combined egg-tissue method for culturing Rickettsia burneti in the production of antigen Q. Lab. delo 7 no.1:42-43 Ja '61.
(MIRA 14:1)

1. Rikketsioznaya laboratoriya Permskogo nauchno-issledovatel'skogo instituta vaktsin i syvorotok.

(ANTIGENS AND ANTIBODIES) (RICKETTSIA)
(BACTERIOLOGY—CULTURES AND CULTURE MEDIA)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMITIN, L. A.

G.M. Fialko and L.A. Kostromitin. A laboratory device to measure the concentration of sulfuric acid and oleum. P. 1268

Ural Scient. Res.
Inst. of Chemistry

SO: Factory Laboratory, No. 10, 1950

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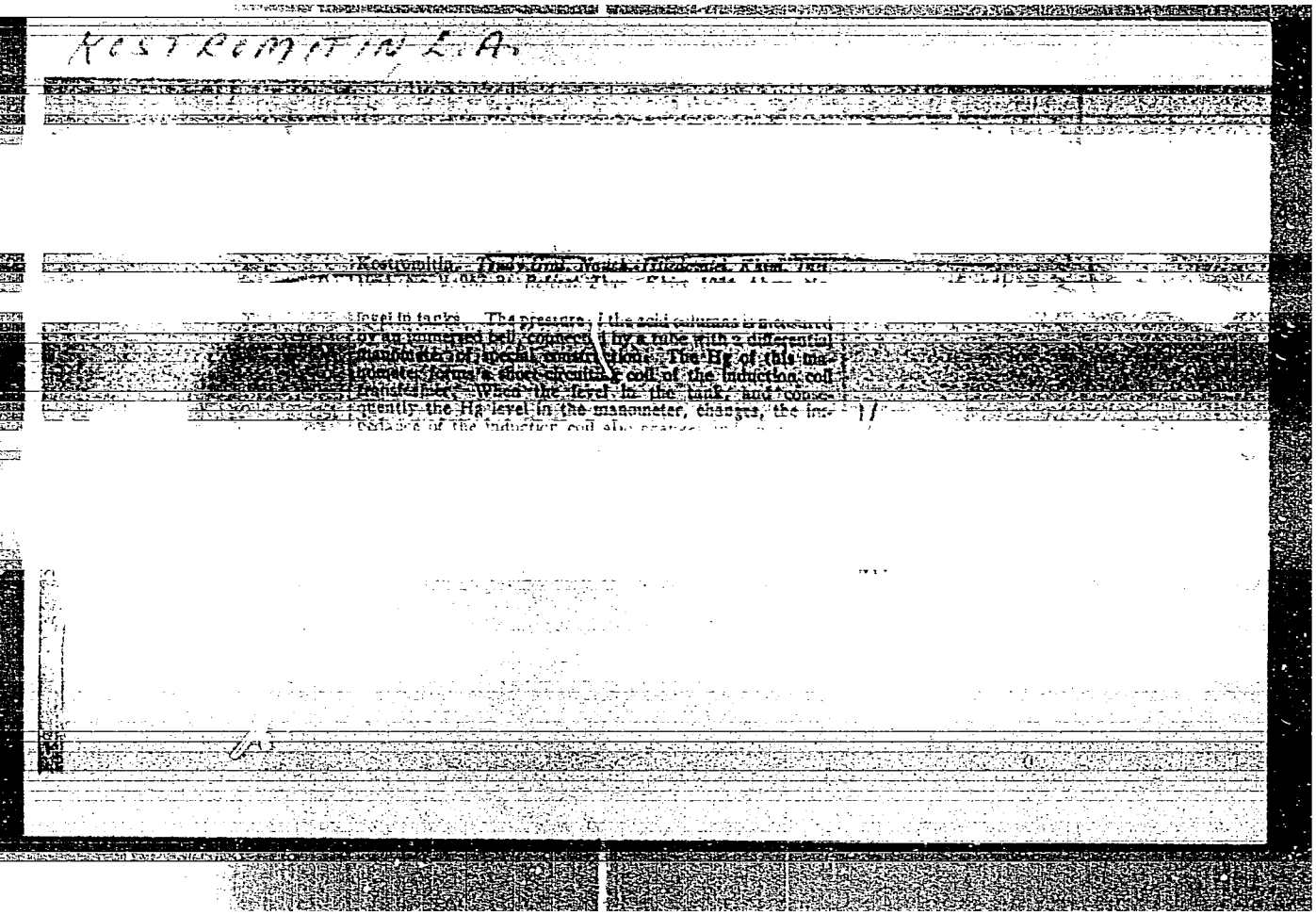

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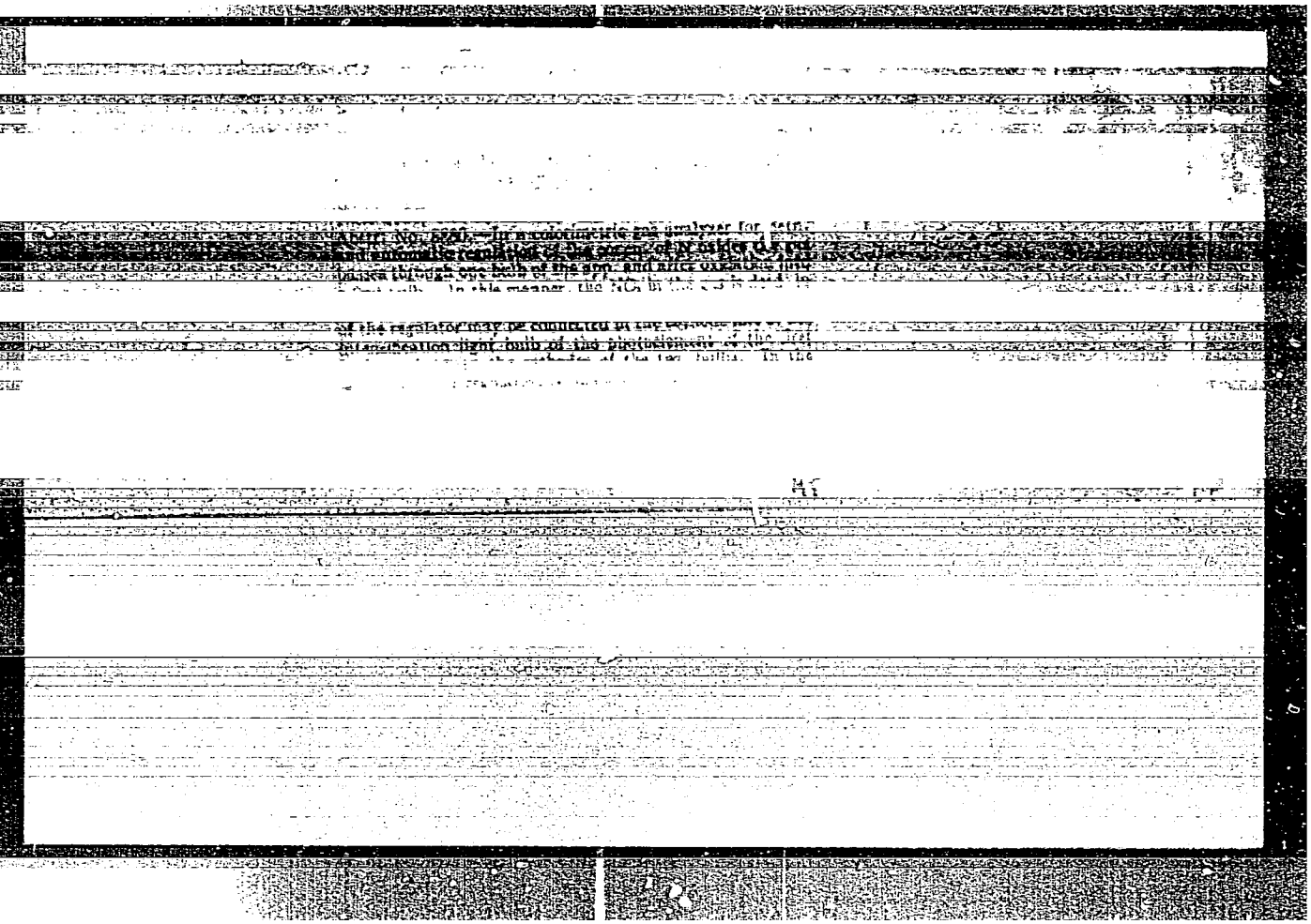

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

USSR/Chemistry - Sulfuric acid FD-[illegible]

Card 1/1 Pub. 50 - 13/20

Authors : Andreyev, A. F. (deceased), Cand Tech Sci; Kostromitih, L. A.

Title : Automatic control of the feeding of flotation pyrite into furnaces

Periodical : Khim. prom. No 5, 297-298, Jul-Aug 1955

Abstract : Describes an automatic control set-up for regulation of the rate of feeding of pyrite dust into furnaces depending on the concentration of the sulfur dioxide coming out of the furnaces. Three graphs, one figure.

Institution : Ural Scientific Research Chemical Institute

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

Kostromitin, L.A.

AUTHORS: Fefelov, A.I., Kostromitin, L.A. 32-11-49/60

TITLE: A Device for the Determination of the Velocity of the Fall of Particles of Finely Dispersed Materials (Ustanovka dlya opredeleniya skorosti padeniya chastits melkodispersnykh materialov)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 11, pp. 1392-1393 (USSR)

ABSTRACT: As the fine grains of material are mostly not round, their falling speed can be determined only by means of an experiment. For this purpose a device fitted with an oscillograph may be used, which is also recommended in this paper. It consists of a vertical tube which, in its upper part, has a closing device with a funnel. Through the funnel the substance to be tested is introduced in form of powder, after which it falls on to the camera with a photoelement which is located below it. The photocurrent is fixed upon the film of the oscillograph. For the illumination of the photoelements 6 incandescent bulbs are provided in the upper part of the camera, which is supplied with current by means of a battery. As soon as the particles of the sample substance supplied through the funnel begin to fall, exposure of the photoelement remains unchanged until the particles begin to settle upon the glass plate arranged immediately above the photoelements thus

Card 1/2

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preventing the light of the 6 bulbs from illuminating it, which, gradually, leads to a reduction of the current in the photoelements. This process goes on until all particles have fallen onto the glass plate, after which uniform (reduced) illumination of the photoelements again sets in. The line of the oscillograph on this occasion first shows a horisontal, and later a downward curved, and finally again a horisontal direction. The speed of fall of the particles can herefrom therefore be computed. In this connection the path taken by the particles in the tube until they reached the glass plate and the beginning and ending of the process of their settling upon the glass plate is taken into account. There are 2 figures.

ASSOCIATION: Ural'skiy Scientific Research Institute (Ural'skiy nauchno-issledovatel'skiy institut)

AVAILABLE: Library of Congress

Card 2/2

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

TROFIMOV, S.S., kand. sel'khoz.nauk, st. nauchn. sotr.; BRYLEV, V.K.; KOCHERGIN, A.Ye., kand. sel'khoz. nauk; KUZNETSOVA, L.Z.; KORLYAKOV, O.I., kand. sel'khoz. nauk, st. nauchn. sotr.; KOSTROMITIN, V.B.; MIKHAYLOV, M.I.; POPOV, P.D., red.

[Soils of the Kuznetsk Basin, a map as the face of a field, laboratory of fertility, vitamins of the earth, protectors of crops, enrichment of feed] Pochvy Kuzbassa, karta - litso polei, laboratoriia plodorodiia, vitaminy zemli, zashchitniki posevov, obogashchenie korma. Kemerovo, Kemerovskoe knizhnoe izd-vo, 1964. 92 p. (MIRA 18:5)

1. Biologicheskiy institut Sibirskogo otdeleniya AN SSSR (for Trofimov). 2. Zaveduyushchiy laboratoriyey zashchity rasteniy Kemerovskoy sel'skokhozyaystvennoy opytnoy stantsii (for Kostromitin). 3. Zaveduyushchiy otdelom zhivotnovodstva Kemerovskoy sel'skokhozyaystvennoy opytnoy stantsii (for Mikhaylov). 4. Zaveduyushchiy agrokhimicheskoy laboratoriyey Sibirskogo nauchno-issledovatel'skogo instituta sel'skogo khozyaystva (for Kochergin). 5. Zaveduyushchaya agrokhimicheskoy laboratoriyey Kemerovskoy sel'skokhozyaystvennoy opytnoy stantsii (for Kuznetsova). 6. Kemerovskaya sel'skokhozyaystvennaya opytnaya stantsiya (for Korlyakov).

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMITINOV, N. M.

"Taking of marrow puncta from calves."

Veterinariya, Vol. 37, No. 1, 1960, p. 46

Dmsk Vet. Inst.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMITINOV, N. M. (Omsk Veterinary Institute)

"Age-conditioned changes of the blood formation in bone marrow and blood composition of healthy calves".

Veterinariya, Vol. 38, No. 2, 1961, p. 70.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMITINOV, N. M., Cand. Veter. Sci. (diss) "Growth Changes of Marrow Blood-formation and Composition of Blood in Healthy and Sick Calves," Khar'kov, 1961, 17 pp. (Khar'kov Zoovet. Inst.) 150 copies (KL Supp 12-61, 281).

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMITINOV, N.M.

Obtaining a marrow punctate in calves. Veterinariia 37 no.1:46-48 Ja '60. (MIRA 16:6)

1. Omskiy veterinarnyy institut.
(Punctures (Medicine))

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMITINOV, N.M.

Age-related changes in medullary blood formation and blood composition in healthy calves. Veterinariia 38 no.2:70-72 F '61. (MIRA 18:1)

1. Omskiy veterinarnyy institut.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMITINOV, V.

Machine-tool for boring brake shoes. Avt. transp. 37 no.7:30 Jl '59. (MIRA 12:10)
(Drilling and boring machinery)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMOV I. A.

Novye issledovaniia o venosnykh klapanakh i kritika uchenila Baradeleben. [Recent research in venous valves and criticism of Bardeleben's theory.] Arkh. pat., Moskva 12:3 May-June 50 p. 79-81.

1. Of the Surgical Ves'yegonsk Hospital (Head -- I. A. Kostromov), Ves'yegonsk.

CLML 19, 5, Nov 50

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMOV, I.A.

Juvenile form of venous valves. Vest.khir. 70 no.2:20-25 F '50.
(MLL 19:3)

1. Of Ves'yegonsk Municipal Hospital (Head Physician -- I.A.Kostromov)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMOV, I.A.

Role of venous valves in formation of varicose veins. Khirurgiia, Moskva no. 1:43-46 Jan 1953. (CLML 24:2)

1. Of Ves'yegonsk Surgical Hospital (Head -- I. A. Kostromov).

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMOV, I. A. Cand Med Sci -- (diss) "Venous Valves," Smolensk, 1956. 18 pp 20 cm. (Min of Health RSFSR, Smolensk State Medical Inst), 130 copies (KL, 19-57, 88)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROMOV, I. A.

USSR / Human and Animla Morphology, Normal and Patho- S-4
logic -- Cardiovascular System

Abs Jour: Ref Zhur-Biol., No 13, 1958, 59863

Author : Kostromov, I. A.

Inst : Not given

Title : Are There Valves in the Portal System

Orig Pub: Vrachebn. delo, 1956, No 9, 933-934

Abstract: The valvular apparatus in the portal system was examined in 60 human corpses of varying ages by injecting the vessels with solutions of different dyes or by examining the vascular intima under a magnifying lens. No valves were found in the portal system (including the veins of the intestinal walls) in any case. --I. B. Barabash

Card 1/1

1. KOSTR APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002

2. USSR (600)

4. Varix

7. Role of venous valves in the etiology of varicose veins. Khirurgiya, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Uncl.

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

SOLDATENKOV, P.F.; KOSTROMSKAYA, F.A.; YAKOVLEVA, K.K.

Effect of gamma rays from a 20 Mev. betatron and from Co^{60} on the cellular elements and blood sugar in rabbits. Dokl. AN SSSR 108 no.6:1065-1068 Je '56. (MLRA 9:10)

1. Ural'skiy filial Akademii nauk SSSR. Predstavleno akademikom L.A. Orbeli.

(GAMMA RAYS--PHYSIOLOGICAL EFFECT)

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41846

S/205/62/002/004/006/014
I015/I215

27.1220

AUTHOR: Kostromskaya, V.A.

TITLE: Effect of ionizing radiation on carbohydrate and lactic acid metabolism in the liver of rats

PERIODICAL: Radiobiologiya, v.2, no.4, 1962, 558-560

TEXT: The various aspects of carbohydrate metabolism in the liver of irradiated animals have not been sufficiently studied. Experiments were carried out on 107 albino rats which were irradiated during one hour with 800r gamma-rays from a ГУТ-Co^{60} (GUT-Co^{60}) apparatus. The first signs of radiation sickness appeared 48 hours after irradiation: the body weight decreased by 4%, diarrhea appeared, and the defence reflexes were markedly depressed. Significant changes in the carbohydrate contents of the liver were not however revealed at that time. The lactic acid contents increased in the irradiated animals' liver by 28% on the second day, and decreased markedly (32%) on the third day after irradiation.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

S/205/62/002/004/006/014
I015/I215

Effect of ionizing radiation...

Histochemical determination of glycogen showed its progressive decrease during the development of radiation sickness - 26% on the second day and 97% on the third day after irradiation. Thus the enzyme systems involved in the carbohydrate metabolism were not yet affected by radiation during the first 24 hours. An increased anaerobic degradation was observed on the second day. The mechanism of changes observed during the third day after irradiation have not yet been clarified. There are 4 tables.

ASSOCIATION: Sverdlovskiy meditsinskiy institut (Institute of Medicine, Sverdlovsk)

SUBMITTED: February 13, 1961

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

ACCESSION NR: AR4027227 S/0299/64/000/002/M014/M014

SOURCE: RZh. Biologiya, Abs. 2M72

AUTHOR: Barbarin, V. V.; Gubin, G. D.; Kostromskaya, V. A.

TITLE: (2M72) Effect of ionizing radiation on tissue respiration. Indices of nucleic acid and glycogen in the process of regeneration.

SOURCE: Sb. tr. Sverdl. med. in-t, vy*p. 39, 1963, 26-37

TOPIC TAGS: radiation, radiation sickness, respiration, tissue respiration, tissue regeneration, nucleic acid

ABSTRACT: In the regenerating planaria Dendrocoelium lacteum and Planaria forva, exposed or unexposed to irradiation (700 r) the authors determined respiratory quotient by the Warburg method, ribonucleic acid by the method of Brachet, and glycogen by the method of Shabadash. It was shown that during regeneration of exposed and unexposed animals, oxygen consumption decreased, and respiration in both groups of animals was characterized by a high level of the aerobic portion of oxido-reductive processes. In the early stages of regeneration, the amount of ribonucleic acid in the cytoplasm increased and the glycogen

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ACCESSION NR: AR4027227

decreased. Later, when differentiation predominated, the RNA/glycogen ratio became normal, due to increased glycogen and decreased RNA. The authors believe that the energy changes leading to regeneration are relatively stable to ionizing irradiation.

SUB.CODE: LS DATE ACQ: 14Feb64 ENCL: 00

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

ACCESSION NR: AR4025764 S/0299/64/000/003/P059/P059

SOURCE: RZh. Biologiya, Abs. 3P393

AUTHOR: Barbarin, V. V.; Gubin, G. D.; Kostromskaya, V. A.

TITLE: (3P393) The effect of ionizing radiation on oxidation-reduction processes, the dynamics of carbohydrate metabolism, and nucleic acids in frog liver

SOURCE: Sb. tr. Sverdl. med. in-t, vy*p. 39, 1963, 38-43

TOPIC TAGS: radiation, radiation sickness, cell respiration, carbohydrate metabolism, DNA, nucleic acid, liver

ABSTRACT: In experiments on frogs (Rana ridibunda) subjected to ionizing radiation at doses of 1000, 1500, and 2000 r, the following were determined: RNA content by the method of Brachet, DNA by the Feulgen method, glycogen by the Shabadash method, and the qualitative and quantitative respiratory quotients of the hepatic cells on addition of KCN as an inhibitor of oxygen consumption. Normally, 58.6% of the intracellular respiration of liver cells proceeds via a pathway which is inhibited by cyanide, and this is completely blocked 1 day

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ACCESSION NR: AR4025764

after irradiation. Similar decreases in cellular DNA and glycogen and increases in RNA were observed 18 hours after irradiation and on subsequent days (up to and including day 16). This decrease in the role of the cyanide-inhibited portion of the respiratory chain, plus the decrease in glycogen reserves observed after irradiation, has led to the hypothesis that a hypoxic state is developed, with increased glycolytic metabolism.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

VORONOV, B.; KOSTROMTSOV, V.

Exhibits relate.... Prof.-tekh. obr. 18 no.7:31-32 Jl '61.
(MIRA 14:7)
(London--Exhibitions)
(Vocational education)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTRON, KAREL.

Chov kozusinovych zvierat. (Vyd. 1) Bratislava, Statne podohospodarske nakl., 1954. 340 P. (Breeding of fur-bearing animals. 1st ed) DA Not DLC

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No. 11 November 1957

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTRON, KAREL.

Chov kozesinovych zvirat. [Vyd. 1.] Praha, Statni zemedelske nakl., 1955. 351 p. [The breeding of fur-bearing animals. 1st ed.]
DA Not in DLC

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

Kostrov, A. I.

124-1957-10-12155

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 10, p 133 (USSR)

AUTHOR: Kostrov, A. I.

TITLE: The Behavior of a Criss-crossed Wooden Plank Wall Subjected to Shear (Rabota perekrestnoy doshchatoy stenki na sdvig)

PERIODICAL: V sb.: 15-ya nauch. konferentsiya Leningr. inzh.-stroit. in-ta, Leningrad, 1957, pp 63-64

ABSTRACT: Bibliographic entry

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APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KATK [illegible], Pavel Pavlovich; KOSTROV, Aleksey Ivanovich; FAYNBERG, Yefim Davidovich [deceased]; AYRUKH, E.G., inzh. retsenzent; IVOCHKIN, V.F., inzh., retsenzent; SMIRNOV, V.I., nauchn. red.; SHAKHNOVA, V.M., red.

[Motorboats and launches made of plastics] Shliupki i katera iz plastmass. Leningrad, Izd-vo "Sudostroenie," 1964. 263 p. (MIRA 17:6)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KATKOV, P.P., inzh.; KOSTROV, A.I., inzh.

Pleasure boat made of plastic materials. Sudostroenie 26 no.10:40-43 O'60. (MIRA 13:10)
(Boatbuilding) (Plastics)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, A. N.

Hoisting Machinery

Hoisting of girders using wall contilevers.
Mekh. trud. rab., 6, No. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

L 00726-67 EWT(1)/EWT(m)/T FDN/WW/DJ

ACC NR: AP6022849 (A) SOURCE CODE: UR/0113/66/000/004/0001/0003

AUTHOR: Kostrov, A. V. (Candidate of technical sciences); Kunyavskiy, B. M.; Yershov, V. V.

ORG: Moscow Automechanical Institute (Moskovskiy avtomekhanicheskiy institut)

64/63 B

TITLE: Transfer of heat to the lubricating oil in engines

SOURCE: Avtomobil'naya promyshlennost', no. 4, 1966, 1-3

TOPIC TAGS: heat transfer, vehicle engine, lubricating oil, vehicle engine cooling system

ABSTRACT: The authors consider transfer of heat to the lubricating oil in automotive engines under various operating conditions since the lubrication system has become an important factor in lengthening the service life of engines in view of the recent tendency toward increased engine power by raising the efficiency of the combustion cycle and increasing the rpm. Heat is transferred to the oil from components heated by friction and gases and from gases which leak into the crankcase through imperfections in the piston rings. The third factor (leakage of hot gases into the crankcase) was not taken into consideration in analyzing the components of heat transfer as it was assumed that the same quantity of heat is dissipated into the ambient atmosphere from the lower walls of the crankcase during stand testing. Heat transfer to the crankcase oil in the MZMA-408 and ZIL-130 engines was experimentally studied in the Automobile and Tractor Engine Laboratory of the Moscow Automechanical Institute. The two engines were stand tested for approximately the same number of hours corresponding to an automobile trip

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of 8000 km. The oil cooling system and measuring equipment are described and a diagram is given showing points of measurement. The oil temperature was measured by thermocouples mounted in the oil lines entering and leaving the engine. The readings were recorded by an automatic potentiometer. Provision was made for controlling the flow of water and oil through the cooling system and for controlling and monitoring the oil pressure. Results for the MZMA-408 engine operating at 2200 rpm show an increase in heat transfer to the lubricating oil from 1250 Kcal/hr under idling conditions to 1500 Kcal/hr under full load, i. e. 20%. The corresponding increase in fuel consumption was from 2.0 kg/hr under idling conditions to 6.4 kg/hr under full load. The relative heat transfer, i. e. the ratio between the heat transferred to the oil and the total heat generated during fuel combustion, is reduced from 0.06 under idling conditions to 0.02 under full load. The relative heat transfer for the ZIL-130 engine varies from 0.012 to 0.024. Thus the experimental results show that 1.2-2.5% of the heat generated during fuel combustion is transferred to the oil in automobile engines under load. A reduction from full load to idling conditions increases this heat transfer to 4-6%. This indicates that most of the heat transferred to the oil is due to friction. About 80% of the heat from gases in the combustion chamber is transferred to the cooling system, and only 20% is dissipated into the lubricating oil. This component represents only 20-25% of the total heat transferred to the oil. Orig. art. has: 2 figures, 1 table.

SUB CODE: 13, 21/ SUBM DATE: none/ ORIG REF: 005

Card 2/2 afs

Card 1/2 UDC: 621.431.73.001.4

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

ACC NR: AP7003517

the cooling water reduced the exhaust valve temperature from 490 to 290C; the weight charge of the cylinder was increased by 5.2%; the slight thinning of the fuel mixture had no effect; other engine parts temperatures did not change; for smooth operation the timing had to be advanced 6°; the power was increased by 7%. For a knocking engine the cooling is more effective when power is increased by 16%. The temperature effect disappeared at 2600 rpm. Using 8-mm tubing, compressed air at 1 kg/cm^2 pressure produced a 50C cooling, and at 2 kg/cm^2 it produced a 100C cooling at 3000 rpm. Since both efficiency and valve life were increased, the tests should be continued for engines with compressors (such as the ZIL-130 automobile engine). To study the thermal conductivity effect of the valve sleeve, three sleeves were tested: the standard powdered metal type of the MZMA-408 engine, the cast iron type of the ZIL-130 car engine, and the bronze sleeve. The maximum temperature change of 25C for the bronze sleeve showed the effect to be insignificant. Orig. art. has: 3 figures.

SUB CODE: 21/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 001

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, A.V., kand. tekhn. nauk; KUNYAVSKIY, B.M.

Measuring the temperature of the antifriction layer of connecting rod bushes. Avt. prom. 31 no.1:3-5 Ja '64. (MIRA 18:3)

1. Moskovskiy avtomekhanicheskiy institut.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

LENIN, I.M., doktor tekhn.nauk, prof.; KOSTROV, A.V., aspirant

Heat transfer to the cooling water in the MZMA automobile engine with small cylinder capacity by external characteristics. Izv. vys.uchab.zav.; mashinostr. no.5:91-100 '62. (MIRA 15:10)

1. Moskovskiy avtomekhanicheskiy institut.
(Automobiles—Engines—Cooling)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, A.V., kand. tekhn. nauk; KUNYAVSKIY, B.M.

Effect of cooling-water temperature on the thermal conditions of parts of motor-vehicle engines. Avt. prom. 31 no.9:3-5 S '65. (MIRA 18:9)

1. Moskovskiy avtomekhanicheskiy institut.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, A.V., kand.tekhn.nauk

Value of the coefficient of heat transfer in determining the temperature of the piston of an internal combustion engine. Avt.prom. 31 no.5:4-7 My '65. (MIRA 18:5)

1. Moskovskiy avtomekhanicheskiy institut.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, A.V.; KUNYAVSKIY, B.M.

Temperature conditions of the piston of the MZMA-407 engine.
Avt. prom. 29 no.8:5-7 Ag '63. (MIRA 16:11)

1. Moskovskiy avtomekhanicheskiy institut.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, A.V., kand. tekhn. nauk; KUNYAVSKIY, B.M.

Temperature of the outlet valve of the MZMA-407 engine.
Avt. prom. 30 no.5:3-5 My '64. (MIRA 17:9)

1. Moskovskiy avtomekhanicheskiy institut.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, B. D.

Metal Cutting

Study of heat phenomena in metal cutting, Stan. i instr. 24, No. 3, 1953

Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, B.D.

New method for studying the strength of lathes. Avt. i trakt. prom. no.7:40-41 Jl '56. (MLRA 9:10)

1. Gor'kovskiy politekhnicheskiy institut imeni Zhdanova.
(Lathes)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

SOV/115-58-5-4/36

AUTHOR: Kostrov, B.D. and Yudin, S.P.

TITLE: An Electrified Pneumatic Micrometer with Fluid Pressure Gauge (Elektrifitsirovannyy pnevmaticheskiy mikromer s zhidkostnym manometrom)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 5, pp 10-11 (USSR)

ABSTRACT: The paper describes the electrification of a pneumatic micrometer developed in the Polytechnic Institute, Gor'kiy having a fluid pressure gauge with a 500-1000 mm water column. In order to avoid electrolysis a 1.5% solution of bicarbonate of soda is used as the pressure gauge liquid. The circuit consists of a transmitter, amplifier, power source and signal assembly. The transmitter converts jumps in the fluid level into electrical signals. It consists of three conductors of varying lengths within the water column in the glass container. The circuit contains three identical amplifiers, with an RKN electromagnetic relay in the anode circuit. When one of the wires

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An Electrified Pneumatic Micrometer with Fluid Pressure Gauge

touches the water the negative grid voltage of the corresponding tube is decreased, the tube conducts and the relay closes. The signal system consists of four signal lamps, the relay contacts and a testing switch. Closing of one of the relays lights one of the lamps, and thus readings of discrete levels of the water column are obtained. In the unit described the signals serve only to light the lamps, but such a unit could also be used for automatic control of technological processes. There is 1 circuit diagram.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

L 8394-65 EWT(d)/EWT(m)/EWP(r) AFMD(t)/ASD(f)/AEDC(a)/ASD(a)-5/ESD(c)/ESD(gs)/ESD(t)/RAEM(t)

ACCESSION NR: AP4048722 S/0179/64/000/004/0054/0062

AUTHOR: Kostrov, B. V.(Moscow) B

TITLE: Self-modeling dynamic problems concerning rigid stamp impressions in an ~~electric~~ plastic half space

SOURCE: AN SSSR. Izvestiya. Mekhanika i mashinostroyeniye, no. 4, 1964, 54-62

TOPIC TAGS: elasticity theory, solid mechanics, surface wave

24

Abstract: The solution of dynamic contact problems in the theory of elasticity entails very much more serious mathematical difficulties, than the solution of similar static problems. Only solutions for stamps which have the shape of a half-plane or band are known from dynamic problems (FLITMAN, L. M. Prikladnaya Matematika i Mekhanika, T. XXIII, No. 4, 1959 and T. XXVI, No. 6, 1962). The problem of a stamp circular in plan (BORODACHEV, N. M., Izv. AN SSSR, OTN. Mekhanika i Mashinostroyeniye, No. 4, 1960), results in a Fredholm equation which is then solved numerically. In the present article solutions of problems concerning constant-speed impressions in an elastic half-

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L 8394-65
ACCESSION NR: AP4048722

space with wedge- or cone-shaped stamps are presented. Precise solutions in quadratures are obtained and equivalent stresses beneath stamps are calculated. It is shown that the problems raised are correct only for the conditions that the edge of the contact region varies over the surface of the half-space with a speed less than the speed of Rayleigh surface waves, for which only the case when the speed of the edge is less than the speed of transverse waves is investigated.

In conclusion the author remarks that the method applied for the solution of an axisymmetric problem in studies by A. YA. ALEKSANDROV (for example, Prikladnaya Matematika i Mekhanika, T. XXV, No 5, 1961) is applicable to static problems in the theory of elasticity.

ASSOCIATION: none

SUBMITTED: 14Mar64 ENCL: 00 SUB CODE: ME

NO REF SOV: 006 OTHER: 000 JPRS

Card 2/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

ACCESSION NR: AP4013384 S/0040/64/028/001/0099/0110

AUTHOR: Kostrov, B. V. (Moscow)

TITLE: Motion of a rigid massive strip sealed in an elastic medium subject to the effect of a plane wave

SOURCE: Prikladnaya matematika i mekhanika, v. 28, no. 1, 1964, 99-110

TOPIC TAGS: elastic medium, strip motion, plane wave, dynamic elasticity theory, Wiener-Hopf-Fok method, transverse wave, moving strip, incident wave

ABSTRACT: The plane problem of motion of a rigid massive strip of finite constant width and infinite length in rigid contact with an infinite elastic medium with a plane wave impinging on it is reduced to two boundary value problems in dynamic elasticity theory for the half-space. Those are solved by the Wiener-Hopf-Fok method. The author obtains formulas for the components of perturbation and the angle of rotation of a strip which contain a finite number of quadratures for finite moments of time. "The author is grateful to N. V. Zvolinskiy for his attention to this work." Orig. art. has: 6 figures, 1 table, and 68 formulas.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

ACCESSION NR: AP4013384

ASSOCIATION: none

SUBMITTED: 01Jul63	DATE ACQ: 26Feb64	ENCL: 00
SUB CODE: AI	NO REF SOV: 004	OTHER: 002

Card 2/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

ACCESSION NR: AP4043286 S/0040/64/028/004/0644/0652

AUTHOR: Kostrov, B. V.

TITLE: Axialsymmetrical problem of the propagation of a crack at normal rupture

SOURCE: Prikladnaya matematika i mekhanika, v. 28, no. 4, 1964, 644-652

TOPIC TAGS: crack propagation, normal rupture, crack propagation velocity, material strength

ABSTRACT: K. B. Bromberg (the propagation of brittle crack, arkiv. fys., 18, Hft 2, 1960) has solved the problem of nonstationary crack propagation in an elastic medium under the action of a homogeneous tension stress in a plane. The present author solves the same problem in space (axial symmetric case). Formulas are obtained for the displacement at the crack surface and for the stresses at the edge. It is shown that, as it is also true in the plane problem, the velocity of the crack propagation cannot exceed the velocity of the Rayleigh surface waves. An equation is obtained which determines the velocity of crack propagation. The author is grateful to N. V. Zvolinskiy, A. A. Guosdev, V. A. Afanas'er, and G. I. Barenblatt for helpful discussions. Orig. art. has: 1 figure and 37

Card 1/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, B.V. (Moskva)

Self-similarity problems involving the propagation of cracks in a tangential rupture. Prikl. mat. i mekh. 28 no.5:889-898 S-O '64. (MIRA 17:11)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

ACCESSION NR: AP4038616 S/0109/64/009/004/0649/0659

AUTHOR: Kostrov, B. V.; Nefedov, Ye. I.

TITLE: Diffraction by a wide slit in a wide waveguide

SOURCE: Radiotekhnika i elektronika, v. 9, no. 4, 1964, 649-659

TOPIC TAGS: waveguide, wide waveguide, transmission line, planar transmission line, flat strip transmission line

ABSTRACT: The problem of incidence of the dominant mode, in a planar narrow waveguide, on a wide slit is solved in a general form by a method of successive diffractions. The normal field derivative $u'(x, 0)$ at the slit is found by successive diffractions, each of them being determined by the Wiener-Hopf-Fock method. Amplitudes of the waves that pass by the slit and return are determined from exact formulas of the theory of waveguide excitation. Finally, an asymptotic presentation of the solution suitable for $ka \gg 1$, $kL \gg 1$, $a \sim L$, where $k = 2\pi/\lambda$, a is

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

ACCESSION NR: AP4038616

a characteristic dimension of the waveguide cross-section, is given. "In conclusion, the authors consider it their pleasant duty to thank B. Z. Katsenelenbaum for his attention to the work and discussing the results." Orig. art. has: 4 figures and 37 formulas.

ASSOCIATION: Institut fiziki Zemli im. O. Yu. Shmidta (Institute of Physics of the Earth); Institut radiotekhniki i elektroniki AN SSSR (Institute of Radio Engineering and Electronics, AN SSSR)

SUBMITTED: 26Feb63 DATE ACQ: 05Jun64 ENCL: 00

SUB CODE: EC NO REF SOV: 006 OTHER: 006

Card 2/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, B.V.; NEFEDOV, Ye.I.

Diffraction on a wide slot in a wide waveguide. Radiotekh. i elektron. 9 no.4:649-659 Ap '64. (MIRA 17:7)

1. Institut fiziki Zemli imeni O.Yu. Shmidta AN SSSR i Institut radiotekhniki i elektroniki AN SSSR.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

L 29990-65 EWT(1)/EWA(h) Peb GW

ACCESSION NR: AP5001049 S/0049/64/000/011/1688/1692

14
13
B

AUTHOR: Kostrov, B.V.

TITLE: Elastic waves accompanying the propagation of a brittle shearing stress fracture

SOURCE: AN SSSR. Izvestiya. Seriya geofizicheskaya, no. 11, 1964, 1688-1692

TOPIC TAGS: seismology, seismic wave, seismic modeling, earthquake, earthquake focus, Rayleigh wave

ABSTRACT: The problem of a mathematical model of an earthquake focus has received considerable attention, but the search for point sources equivalent to earthquake foci with respect to the seismic waves emanating from them has been based solely on observational data and intuitive concepts. since the solution of dynamic problems in the theory of elasticity involved in attempts to take into account the characteristics of motion at an earthquake focus on the basis of any hypothesis meets with insuperable mathematical difficulties. However, some recent successes in the theory of the diffraction of elastic waves has led to some progress in the solution of such problems. in particular, L.M. Flitman (Prikl. matem. i mekhan., 27, No. 4, 1963) has presented a solution for the plane problem of instantaneous formation of a fracture of finite width in a medium subjected to uniform shear. The author of this article has considered this problem further

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L 29990-65
ACCESSION NR: AP5001049

(Prikl. matem. i mekhan., 28, No. 5, 1964), but formulated it differently in that it was assumed that the fracture is propagated from a point at a constant velocity, rather than considering the formation of the fracture to be instantaneous. In this new investigation of this problem, it is assumed that a shearing stress fracture propagating in an elastic medium can be considered to be a model of an earthquake focus; on the basis of his earlier study, an investigation is made of the field of elastic disturbances generated by such a source. The theoretical development of this problem is presented, followed by a brief comparison with a number of earthquake focus models described in the literature. Orig. art. has: 22 formulas.

ASSOCIATION: Institu fiziki Zemli, Akademiya nauk SSSR (Earth physics institute, Academy of sciences, SSSR)

SUBMITTED: 08May64 ENCL: 00 SUB CODE: ES

NO REF SOV: 006 OHTER: 003

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Card

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, B.V.; NEFEDOV, Ye.I.

Asymptotic representation of the solution of a problem on diffraction on a wide slit in a wide waveguide. Radiotekh. i elektron. 9 no.8:1496-1500 Ag '64. (MIRA 17:10)

1. Institut fiziki Zemli im. O.Yu.Shmidta AN SSSR i Institut radiotekhniki i elektroniki AN SSSR.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, B.V.

Elastic waves accompanying the propagation of a brittle crack of a tangential dislocation. Izv. AN SSSR. Ser. geofiz. no.11:1688-1692 N '64. (MIRA 17:12)

1. Institut fiziki Zemli AN SSSR.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, B.V. (Moskva)

Diffraction of an elastic wave on a solid strip soldered onto an infinite elastic medium. Prikl. mat. i mekh. 28 no.6: 1092-1100 N-D '64 (MIRA 18:2)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

L 21830-66 EWA(h)/EWP(k)/EWT(d)/EWT(1)/EWT(m)/ETC(m)-6/T-2/EWP(w) EM

ACC NR: AP6007589 SOURCE CODE: UR/0040/66/030/001/0198/0203

AUTHOR: Kostrov, B. V. (Moscow)

ORG: none

TITLE: Diffraction of a plane wave on a rigid wedge inserted without friction into infinite elastic media

SOURCE: Prikladnaya matematika i mekhanika, v. 30, no. 1, 1966, 198-203

TOPIC TAGS: shock wave diffraction, elastic fluid, wave equation, acoustic wave

ABSTRACT: Consider an elastic medium with shear modulus μ with longitudinal and transverse wave propagation velocities a and b, filling the space $r \geq 0$, $0 \leq \theta \leq \pi/k$, and bounded by a solid wedge with boundary conditions

$$u_\theta = 0, \quad \tau_{r\theta} = 0 \text{ at } \theta = 0, \pi/k, \quad 0 < r < \infty.$$

To obtain an analytic solution of wave diffraction over the solid wedge, it is assumed that for $k < 1$, on the wedge apex, the stress and deformation change as $1/r$, or

$$u = O(r^\lambda) + \text{const}, \quad \lambda > 0 \text{ at } r \to 0.$$

Also, the potential of the incident wave is described by a Heaviside step function

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$H(\tau)$. The required longitudinal and transverse potentials are then divided into two components: the incident wave and the reflected and diffracted waves. Thus, the incident longitudinal wave is expressed by

$$\varphi = H\left(\frac{at}{r} + \cos(\theta - \theta_0)\right) + \varphi_1, \quad \psi = \psi_1,$$

and the longitudinal wave by

$$\varphi = \varphi_1, \quad \psi = H\left(\frac{bt}{r} + \cos(\theta - \theta_0)\right) + \psi_1.$$

Each case is solved separately, and it is shown that the results coincide with acoustic solutions if the incident wave (ray) is directed along the wedge bisector. The asymptotic expressions are also calculated for the displacement near the diffracted wave. Orig. art. has: 24 equations and 4 figures.

SUB CODE: 20/ SUBM DATE: 08Sep65/ ORIG REF: 004/ OTH REF: 001

Card 2/2 nst

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

L 38709-66 EWT(1) GD

ACC NR: AT6016916 (N) SOURCE CODE: UR/0000/65/000/000/0432/0443

AUTHOR: Zvolinskiy, N. V.; Flitman, L. M.; Kostrov, B. V.; Afanas'yev, V. A.

ORG: Institute of Physics of the Earth, AN SSSR, Moscow (Institut fiziki Zemli AN SSSR); Institute of Problems of Mechanics, Academy of Sciences, SSSR (Institut problem mekhaniki Akademii nauk SSSR)

TITLE: Some problems in the diffraction of elastic waves

SOURCE: International Symposium on Applications of the Theory of Functions of Continuum Mechanics. Tiflis, 1963. Prilozheniya teorii funktsiy v mekhanike sploshnoy sredy. t. 1: Mekhanika tverdogo tela (Applications of the theory of functions in continuum mechanics. v. 1: Mechanics of solids); trudy simpoziuma. Moscow, Izd-vo Nauka, 1965, 432-443

TOPIC TAGS: elasticity theory, partial differential equation, integral equation, boundary value problem, approximate solution

ABSTRACT: Three problems are studied: (1) That of waves formed in an elastic medium as a result of momentary disturbance of the continuum along an infinitely long plane strip of finite width. The dynamic equations of elasticity theory are solved under boundary value conditions corresponding to time with initial conditions zero. The problem is shown to be reducible to the Wiener-Hopf problem; (2) The problem of motion under the action of a plane wave of a solid infinite strip in an elastic space. This

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

ACC NR: AP7001997 SOURCE CODE: UR/0040/66/030/006/1042/1049

AUTHOR: Kostrov, B. V. (Moscow)

ORG: none

TITLE: Nonstationary propagation of a longitudinal shear crack

SOURCE: Prikladnaya matematika i mekhanika, v. 30, no. 6, 1966, 1042-1049

TOPIC TAGS: crack formation, shear stress, stress analysis

ABSTRACT: A method of analysis developed in the theory of compressible supersonic flow is applied to the solution of the problem on the propagation of a longitudinal shear crack for the two-dimensional case when displacement is parallel to the edge of the crack. It is assumed that the elastic medium outside the crack is infinite, has a shear modulus of $\mu = 1$ and a velocity of transverse wave propagation $b = 1$. It is further assumed that all of the forces on the medium are directed along the longitudinal axis and are constant along the axis. In this case the strain vector and the stress tensor are independent of the longitudinal coordinate. A series of equations are derived which make it possible, in principle, to investigate the propagation of a longitudinal shear crack for arbitrary loading and for any interval of time if the variation in the modulus of coupling as a function of crack propagation rate is known. The only limitation is that the initial length of the crack must be finite and large

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ACC NR: AP7001997

compared with the dimension of the edge region so that the concept of the modulus of coupling remains valid. The initial phase of crack propagation lends itself to rather simple analysis. However, as the crack progresses the analysis becomes very complicated and can be carried out only numerically. Orig. art. has: 3 figures, 47 formulas.

SUB CODE: 11,13,20/ SUBM DATE: 11Apr66/ ORIG REF: 005/ OTH REF: 003

Card 2/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

L 44697-66 EWT(d)/EWT(m)/EWP(k)/EWP(h)/T/EWP(v)/EWP(t)/ETI IJP(c) DJ/JD/WB

ACC NR: AR6010657 SOURCE CODE: UR/0276/65/000/010/B185/B185

AUTHOR: Kostrov, G. V.

TITLE: Effect which surface-active substances in the coolant have on the grinding process

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya, Abs. 10B1261

REF SOURCE: Tr. Seminara po vopr. progressivn. metodov shlifov. i dovodki detaley, obespech. vysok. i stabil'n. tochnost' i dolgovechn. podshipnikov kacheniya. M., 1964, 183-190

TOPIC TAGS: grinding, bearing race, antifriction bearing, surface active agent, metal finishing, OLEIC ACID

ABSTRACT: It is established that the soda solution used as a coolant on the 1GP3 with a 0.01-1% concentration of calcined soda and a 0.3% concentration of sodium nitrate is not surface-active. Experimental investigation of the operation of ground races in bearing rings showed that the use of oleic acid (commercial grade, i. e. not extremely pure) in an aqueous solution of triethanolamine or in mineral oils improves surface finish by 2-3 classes and eliminates burn streaks on the rings during grinding. The relatively stronger effect of oleic acid as an adsorbing material shows up in small concentrations (0.2-1%). The lowest power consumption and highest grinding wheel sta-

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ACC NR: AR6010657

bility are observed at these concentrations. A further increase in oleic acid concentration reduced abrasive stability without improving the finish of the surface being gfround. 7 illustrations, bibliography of 4 titles. L. Tikhonova. [Translation of abstract]

SUB CODE: 13

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Card 2/2

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, Ivan Nikolaevich

KOSTROV, Ivan Nikolaevich. The Nadejdinsky& Taganrog metallurgical works; production of roafing iron. Moscow, 1929. 38 p., 1 l. (The chief concession committee of the Council of people's commissaries of the USSR.).

DLC: TS330. NcK612

SO: LC, Soviet Geography, Part II, 1951, Unclassified

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

Kostrov, Ivan Nikolaevich The mechanization of labor consuming work on the construction of Volga hydro-electric stations Moskva Pravda 1951.

22 p. (52-24341) TA725.K6

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, Ivan Nikolayevich; SURZHANNIKO, A.Ye., inzhener, redaktor; UDOD, V.Ya., redaktor; MEDVEDEV, L.Ya., tekhnicheskiy redaktor

[The operator-motorman for spray painting machinery] Operator-motorist okrasochnogo agregata. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1955. 47 p. (MLRA 8:7)
(Spray painting)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

KOSTROV, I.E., inzhener, laureat Stalinskoy premii, redaktor; POPOV, V.I., redaktor; VOLKOV, V.S., tekhnicheskiy redaktor.

[Earthwork; collection of articles] Proizvodstvo zemlianykh rabot; sbornik statei. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 102 p. (MIRA 9:6)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut organizatsii i mekhanizatsii stroitel'stva.
(Earthwork)

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KOSTROV, I., inzh.

Building machinery in the Polish People's Republic. Stroitel' no.4:24 Ap '60. (MIRA 13:6)
(Poland--Excavating machinery)
(Poland--Mixing machinery)

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SHESTOPALOV, Aleksandr Osipovich, kand. tekhn. nauk; BONDARENKO, Viktor Ivanovich, inzh.; KOSTROV, I.N., inzh., retsenzent; ENGEL', F.F., inzh., nauchnyy red.; GENKIN, Ye.M., red.; SEMUSHKIN, I.S., tekhn. red.

[Lowering the water level in the construction of the Volga Hydroelectric Power Station (22d Congress of the CPSU)] Vodoponizhenie na stroitel'stve Volzhskoi gidroelektrostantsii imeni XXII s"ezda KPSS. Moskva, Gidroproekt, 1962. 86 p. (MIRA 17:4)

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USSR/Soil Science. Mineral Fertilizers J

Abs Jour : Ref Zhur-Biol., No 13, 1958, 58302, By Z.I. Zhurbitskiy

Author : Nikitenko G. F., Klochkova M. A., Kostrov K. A.
Inst : Not given
Title : On the Effectiveness of Mixtures of Organic and Mineral Fertilizers in Chernozem Soils

Orig Pub : Agrobiologiya, 1957, No 3, 16-22

Abstract : The effectiveness of organo-mineral mixtures was tested on agrillaceous chernozem in the Mordovsk Experimental Agricultural Station in 1954—1956. A yield of 26.7 centners of winter wheat per hectare was obtained in 1955, a very favorable year; the addition of 20 tons of manure produced an additional yield of 6.2 centners per hectare; of 3 tons of humus--an additional 6.7 centners

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825230002-9

USSR/Cultivated Plants - Commercial. Oil-Bearing. Sugar-Bearing. M-5

Abs Jour : Ref Zhur - Biol., No 7, 1958, 29955

Author : Kostrov, K.A.
Inst : -
Title : The Agrotechny of Sugar Beet Cultivation in Moldavia.

Orig Pub : S. kh. Povolzh'ya, 1957, No 9, 44-46.

Abstract : No abstract.

Card 1/1

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USSR/Cultivated Plants - General Problems. M-1

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 58489

Author : Klochkov, A. M.; Kostrov, K. A.; Koval'chuk, P. A.
Inst : Not given
Title : Occupied Fallows in Mordoviya

Orig Pub : S.-kh. Povolzhya, 1957, No 12, 13-15

Abstract : No abstract given

Card 1/1

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